## Farm Income and Financial Forecasts, November 2016 Update Transcription

## 11/30/16

Good afternoon everyone and welcome to our webinar, Farm Income and Financial Forecasts for 2016. My name is Nancy McNiff and I will be your host. The webinar is being recorded and will be posted on the ERS website. I put in the Chat Feature the URL where it will appear at a later date. At any time during this webinar you may enter a question into the chat feature at the bottom left corner of your screen and our speaker will answer your questions at the end of the presentation. Our speaker today is Jim Williamson. Jim is an economist with the Farm Economy Branch of the Economic Research Service. He leads the agency's Farm Income and Wealth Statistics Program. Previously Jim has served as a senior economist on the Council of Economic Advisers and the Office of the President. I think we're ready to start. So Jim you can now begin your presentation.

All right thank you Nancy. Welcome to everybody.

My name is Jim Williamson and I will be presenting
the farm income and financial forecasts for 2016,
the November update. All right so let's get started.

So in summary I'd like to present some top level

information so net cash farm income and net farm income are both forecast to decline by double digits, net cash farm income is down 14.6 percent over 2015 and net farm income is down 17.2 percent. The value of agricultural sector production again is forecast to fall and this will be the third straight year. And this is due largely to declines in animal and animal product cash receipts but also related to a drop in farm income related, farm related income. That would be income sources like grazing, machine, hire, custom work. Government payments are partly offsetting the decline in cash receipts. So we have a rise of 19.1 percent or 12.9 billion dollars up to a total of 12.9 billion dollars. And this is driven by primarily by increases in PLC, up about 160 percent and agricultural risk coverage which is up nearly 36 percent. Total commodity insurance indemnities are forecast to fall and this is largely on a decline in the federal crop insurance or FDIC insurance indemnities. And this is due to a general decline in the number of insurable, quality of insurable losses. Also contributing to net cash income is the total production expenses which are forecast to decline 2.6 percent. So we've, this is a again a year over year fall and production expenses, expenses. Finally declining farm sector assets are offsetting the rise in debt. So we have an erosion of equity of about 3.1 percent.

So we last gave our farm financials report in August and given this is

an update we want to let you know how things have changed since then. We get this question a lot.

So in August we had net farm income at 71.5

billion dollars The November, this November update we have net farm income at 66.9 billion dollars. And so we want to give you an idea of what has changed since then. So keep in mind that we, this newest update for November incorporates the November WASDE price and quantity information. We also have new monthly marketing patterns that we've incorporated into this latest farm income update.

So the primary, primary drivers of the change over the August 2016 net farm income number are crop receipts which are up 4.2 billion dollars. But this is offset by a decline in animal and product receipts so those are down 4.7 billion dollars. Cash expenses were a little higher than we had predicted forecast in August.

It's .9 billion dollars higher. So that is that's also contributing to the decline.

So ultimately we have a 4.6 billion dollar difference between the November 2016 forecast, net farm income forecast and the August 2016 forecast.

Now moving to net cash farm income we're expecting to see it fall again to the lowest level since 2009. And so net cash income is a measure of the farm's resources, the ability to pay down debt and to make investments, net farm net cash income includes CCC income, commodity insurance, direct government payments, as well as other farm income, for example custom work and hiring.

And this is all less cash expenses. So we forecast net cash income down nearly 15 percent. And this follows a 20, 20 percent decline in, in 2015.

So I think one thing to recognize is the direct payments act as a, as a counterbalance and so we see direct payments, government direct payments increasing as farm, as other farm income decline. So for 2016 the government payments make up about 14 percent of net cash farm income.

So net farm income which is the, which includes net cash income plus non-cash income for example the imputed rental value of the dwellings as well as non-cash, non-cash expenses and this would be is primarily made up of capital consumption or what we what we use as a proxy for depreciation, net farm income is dipping as well and net farm income is forecast at 66.9 billion dollars for 2016. And this is down 17 percent over 2015.

Now again we like to show how we're getting from our 2015 net farm income to our 2016 forecast. So in 2015 we forecast, oh the number that farm income number was 80.9 billion dollars. And again once again the forecast for 2016 for net farm income is 66.9 billion dollars.

So that's a 14 billion dollar difference. And this is accounted for primarily by a decline in livestock receipts. So that's down 23.4 billion dollars. And this is because this comes on nearly across the board declines and all types of livestock receipts, save turkeys which are up.

Cash, crop cash receipts, on the left, left side are up marginally essentially unchanged over 2015 but this masked a lot of variation. Soybeans are up but corn is down as are many of the other grains and crops.

Production expenses are down which is contributing to a little bit of a growth in net farm income. So they're down over 2015 by 9.2 billion dollars.

And finally government payments are up 2.1 billion dollars over 2015.

Now we'd like to give you an idea of what's accounting for this change in net cash, in cash receipts. Is it, the question is, is it a price change or is

it a quantity change? So we're providing an illustrative exercise where we would hold either the price in 2015 constant or the quantity in 2015 constant to arrive at a 2016 forecast. So if we were just to change the prices for 2016 and hold the quantities at their 2015 level, we would see a decline in cash receipts of 41.3 billion dollars. Conversely if we were to hold prices at the 2015 level and change the quantity to the 2016 levels we would see a rise of 17.5 billion dollars. So in some cash receipts are down 23.4 billion dollars. And the main driver is the price, total commodity prices.

So breaking out cash receipts by crops. So as I mentioned crop receipts are forecast down for nearly all crops save soybeans and since soybeans represent such a large, a large portion of crop receipts nearly 20, 20 percent a little bit more than 20 percent. We have a net overall change that is very small but positive. So corn is down over its 2015 number. Well cotton is up slightly. Fruits and, fruits and nuts are, have fallen, vegetables and melons down, and so is wheat.

On the livestock or animal and animal product side, we have animal and cash receipts down overall of 12 percent over 2015.

All the major categories are seeing declines. And this is led by cattle and calves as we marked here. Egg, egg production has recovered over 2015 and prices have dropped off precipitously and therefore we see a really large drop in chicken egg prices.

The government payments as I mentioned make up they're making up more than 14 percent of the cash income due to the, to the sector for 2016.

And this is this will give you an idea of the mix of types of programs that are, are accounting for that. So again government payments are forecast to

increase by 19 percent to a total of almost 13 billion dollars in 2016.

So as you can see the price related programs are really accounting for most of that in 2016. Now I'd also like to mention that the number in 2016 is inclusive of about 300 million dollars in the cotton ginning cost share program which is new for 2016.

Federal commodity insurance indemnities also make up farm income.

And for 2016 we're forecasting the federal insurance indemnities to

be down over 2015 while the premiums that the farmer pays are up slightly.

So we have them rising by about 1.2 percent, the premium payments 1.2 percent which is about 3.7 billion dollars.

Moving on to the farmers costs. So the big story is that the total production expenditures are forecast down 2.6 percent overall. So we'd like to point out that it's fairly rare to see expenses decline year over year so we have two years in a row though we are seeing production has been expenditures falling and this hasn't happened since, since the 80s. And so what we will be presented here is a time series of total production expenditures back to 1970. So what we can see here is that expenditures grew by about 8 percent annually between 2010 and 2014. And now we've seen two years of declines. I would also note that in, in real terms total production expenses are still high relative to the 1970s-1980s.

Breaking out the farmers costs a little bit more. We have a chart of total expenditures by the type. So the first two categories feed and livestock purchases or farm origin. So these are, these are produced on the farm so you can see livestock purchases are down and this is a reflection of falling cash receipts for livestock, feed is, feed is

up a little over 2015 and this is accounted for by a change, an increase in livestock inventories.

Fuels and oils and fertilizers which are derived from natural gas are both down. So these are following the market trend for petroleum. Pesticides and seeds, again so pesticides are up a little, seeds down a little over 15, net rent to the farmer is down slightly. So net rent which is inclusive of cash, any cost shared between the farmer and the landowner. And so it's ultimately down a little bit. Interest expenses

On the other hand labor expenses are up following the general increase in the wage index.

On the balance sheet side, we see, what we present you here is inflation adjusted numbers so the value of assets is forecast down 3.4 percent relative to 2015. So this is on falling land values as well as a lower holding, lower value of machinery and equipment that's held.

The inflation adjusted value of farm real estate is forecast up 7.1 percent though.

Non-real estate... (Coughs) Excuse me, debt non-real estate debt forecast down about .1 percent.

Turning to the financial ratios. So if you want to look at, consider the solvency of the sector, the debt to asset ratio and the debt to equity ratio will give us an idea of the sector's ability to meet, to meet payments and in the face of some kind of crisis. So the debt to equity ratio and the debt to asset ratio have been ticking up. So for the fourth straight year both of these are forecast to rise. We'd like to point out

that going back to 1970 these ratios are relatively low compared to these, to the past so to the 1980s, 1970s. So while they both, while they're both ticking up we still see them relatively low.

Moving from the sector to the farm business, we'd like to present a little bit of information at the farm business level, so farm businesses by our definition are operations with greater than \$350,000 in gross cash income plus those operations who don't meet that gross cash income threshold but have a principal operator who's a farmer as a principal occupation, as a primary occupation. So as you can see from the chart, the red, the red plus the blue bars are the farm businesses. So farm businesses make up a slight minority of all farms. But as you can see they hold the vast majority of value production. A majority of assets as well as the majority of debt.

So that's why we're going to focus on the farm business going, going forward here.

So I'd like to present the net cash income of crop farm businesses first.

And so what, what this is telling us is the average net cash income.

So again this is, this is receipts plus government payments, indemnities, CCC payments, loans, funds minus cash expenses. So as you can see for the crops we have crop farm businesses actually improving over 2015.

So a mixed grain farm business is up 200 to an average of 198,000 dollars average net cash income. Wheat farm businesses are up as well as corn and soybean.

The only specialty is, the only farm business that we have down are specialty crops.

And so these are farms that employ a lot of labor.

They also use a lot of water. So their expenses are moving higher overall.

On the livestock side, again for farm businesses

average net cash income is down across the board for these farm businesses. So we have cattle and calves. The average net income for a livestock farm specializing in cattle and calves is \$39,000.

Dairy on the right 165,000 dollars in net cash income.

So the primary driver for these changes in the livestock are prices, so commodity prices are driving them lower. The net cash, the receipts are down resulting in lower net cash income.

So for dairy in particular down 25 percent.

This map will give you an idea of how the impact, of how the impact of the regional distribution of farming patterns, cropping patterns, production is affecting different regions. So for example as we just saw the livestock net cash income is down nearly across the board. So we have the Basin and Range down 15.1 percent. This is an area that was specialized in cattle livestock.

The Northern Crescent down 9.5 percent. This is driven, this is driven by dairy, the declines in dairy. On the other hand, the Heartland is up 4.1 percent.

And this is on the strength of soybeans Mississippi Portal up

11.8 percent. Again this would be on the strength of cotton and rice.

Now looking at the solvency of farm businesses digging into it again will look, we'll look at the debt to asset ratio.

And so we like to point out that nearly 90 percent of crop farm businesses have a debt to asset ratio that's lower than .4. So these are, these are farm businesses that we would look at in a healthy territory. We like to point out though that there are some farms for example highly leveraged farms which are farms with a debt to asset ratio between 0.4 and 0.7. That number is 6 percent

for crop farms extremely leveraged farms which has farms with a debt to asset ratio of at least 0.7 or greater has been creeping up that this percentage has been creeping up since 2011 and stands at nearly 5 percent.

On the livestock side, we see that there are the same picture we have extremely leveraged farms, livestock farms like the crop counterparts have been creeping up recently and stands at nearly 5 percent, the level of the share of highly leveraged farms has been relatively stable at close to 5 percent as well.

So finally we'd like to talk about the farm, the farm household. So this is, this considers the entirety of the farm household, the farm business plus earnings from off farm and gives us an understanding of the well-being of the farm household. So the contributions that income from off farm work plus farm work and farm income have on the household.

So pointing out that most farm households get a majority of their income from off farm sources.

We see that there are for the median farm household, off farm income has actually increased over 2015.

So at 2016 we have a forecast that the median farm household will have off farm income of 69,000 dollars, nearly 69,000 dollars.

Total household income for the median farm household been, is about flat over 2015, so it stands at 76,839 dollars.

So finally I'd like to leave you with some key reference data that you can, just to remind everyone where we stand.

So for 2016 for November the forecast for net farm income is 66.9 billion dollars and net cash income,

90.1 billion, total sector equity is down over 2015.

It stands at 2.5 trillion dollars, total household income is up slightly for the median farm household at 76,839 dollars.

So that concludes the farm income forecast webinar for November 2016. I like to remind you that our next forecast for 2016 will be in February 2017, February 7th and at that time will also present our first farm income forecast for 2017.

And thank you I'd like to answer any questions I can.

Okay thanks Jim. Now if anybody has any questions you can enter them in the Chat Feature and I will relay the question to him.

We have our first question. What is the difference between an estimate and a forecast of farm income?

Okay well...we Let me say first we produce end year forecast.

So for 2016 we would only produce a 2016 forecast.

Our estimates are set about a year and a half after the year is concluded, the calendar year is concluded. And this is results, this is a result of essentially a lag in our data.

So the forecast is essentially what we were predicting that year will be given that we don't have the information there.

So we just set an estimate for 2015 in August of 2016.

And this was based on the data that had become available.

Okay another question, when you use the term income is that gross sales, net sales or gross profit?

Okay so we use a couple of terms for income, there's net cash income. So net cash income includes cash receipts from the farm, it includes other farm income that would be money from custom work, grazing fees that they earn. It would also include government payments.

So that would net cash income is inclusive of government payments, of farm insurance and commodity insurance indemnities as well as CCC loan funds. Net farm income is net cash income less cash expenses less non-money expenses plus non-money income.

Okay we have another question about the drop in livestock receipts. Do you know what is driving that? And is there any expectation for that to improve moving forward?

The drop in livestock receipts is driven by, it's driven by price. So we're seeing a drop in the price, it's driving the drop in, in cash receipts for livestock.

And I don't think we have a prediction for what's going to go going on forward. We'll wait for new price information from WASDE.

There's another question about the increase in total debt from August.

They say they noticed a substantial increase in total debt from the August forecast but there's relatively little change in the interest expense.

Also the 2016 interest expense declined from 2015. Can you explain why that is or talk about that?

What we, since August we have gathered new information.

So we have different, we have new information on loan quantities and so that's that's what's driving the update.

So the distribution of types of loans as well as the loan quantity is what's changing.

Okay how many and in number terms?

You know the number of crop and livestock businesses that are considered highly leveraged versus the percent? They're looking for the number of businesses.

Do you have that?

I don't have that in hand but if the person with the question leave an email address we could get that number I think.

Okay all right. Let's see.

Based on recent early indications, does 2017 look like the fourth straight year of decreases or will the income go up or is that too early to say?

For us it's too early to say. We currently only have a forecast for 2016.

Given that commodity, sorry I guess the question is really, why are feed prices up,

do you have any indication as to why they are up? Even commodity prices?

That's correct. So feed prices are up based on higher livestock inventories. So remember the feed prices is a function of the price and the quantity used. And so what's driving that is a greater quantity. And what we, what we've seen is larger holdings of livestock inventories.

Can you compare farm sector equity to now, I guess compared to the 1980s? How does it compare?

Okay let me... I think the best thing I can do is bring up the slide for the question, so equity... So in the late 70s and early 80s we did see a large run up in equity. So this is, this is driven and these are in real terms, these dollars are in real terms so this is inflation adjusted. So we do see. So if you can, as you can see we are higher in terms of equity now but the late 70s, early 80s represented a time of relatively high equity and this was, this was based on land values. So you can see the debt wasn't, the debt wasn't too much higher then.

Okay somebody has a question about slide number 24.

I guess the key reference state I guess this is, the farm income plus the off farm income doesn't seem to equal household income. Can you that is there some other element that's not there? Those two won't add together, the farm income plus off farm income won't add. These are medians. So some farms don't have, they have zero farm income, some farms have in some years have zero off farm income. So we, these are just the

medians and so they won't, they won't add to the total household income.

Okay in terms of the operation expenses for labor costs which indicator do you use to forecast labor cost?

You know we do use an employment cost index so for wages and salaries.

Let's see, there's another question.

Hold on one second. Under higher...

Did the recession affect farm income at all?

So actually during 2008 and 2009, we started to see net farm income increase. So as well through 2010, 2011, 2012.

So it didn't bring the answer was it didn't, the recession didn't bring down sector income and in fact it was, you know, the run up was driven more by factors in the market, on the ground.

The strong Midwest crop yields this year seem to have affected your updated figures. Is that the case or is it something else?

Yeah that's that is, that is the case. So there were, there was a revision for crops. So like let me go back to the, oh I think what was the first slide here, to show you that the difference between August and November. So this, this was represent what, what new information we have for the 2015 forecast. And like I said we had new WASDE prices. So we're using the November WASDE release. And there were you know significant revisions to prices that affected cash crop receipts.

And among them would be soybeans. So we saw a large change or a change in the quantity and that's what's affecting the Midwest in particular.

Okay another question. Are larger farm businesses the ones that have with 350,000 or greater income, are they doing better than the smaller farm businesses?

Okay let me bring up the, I don't know what the definition of smaller farm business would be. So the I guess the, we, I guess I don't have an answer for that.

We can get an answer for that person.

Let's see of the proportion of farms that
have shown sharp increases in debt to asset, the
ratio in recent years. Do you have any information about what
types of farms are seeing the most pressure?

We're working on that but we don't have something that we can present right now.

What uncertainties still exist in the 2016 forecast?

Okay so the 2016 forecast will still rely on new updated information that we'll get in 2017 on how farmers have marketed their 2016 crops. So the 2016, 2016, 2017 marketing year it is.

So we'll better know how much of the crop was marketed in 2016 versus 2017. So we'll, we'll see, we might see some movement in the marketing patterns and that could drive, that

could change the net farm income number.

And how has the downturn in farm income affected rural America?

Well I think overall the effect would be small in rural America.

However there are probably more than 400 counties
that we would call farm independent so that the
majority of income employment would be from farming.

So those counties would be affected, negatively affected.

So while the, if we consider rural America as a whole, the effect
would be dispersed. There are, there are many counties out there that
still would be quite affected.

Okay, Jim that's all the questions that we have. If anybody wants to view this presentation again it will be, it is being recorded and it will be closed captioned and posted on our website at the URL I put in the Chat Feature which is www.ers.usda.gov/multimedia. And thank you very much Jim for doing this webinar today and thank you all for joining us and have a great day.

Thank you.